

***Craterium minutum* (Leers) Fr. SM88 (= PDD 117229) - An excellent match to the description in 'Stephenson, S.L. 2003. Myxomycetes of New Zealand. *Fungi of New Zealand* Volume 3. Fungal Diversity Research Series 11: 1-238.'**

Collection site: Remutaka Forest Park, Orongorongo Track (See red arrow on map insert)

Substrate: On the surface of a fragmented dead leaf of *Freycinetia banksii* (kiekie)



Collection date: 18 September 2019

Collector & Identifier: Dan Mahoney

Voucher materials: Dried herbarium specimen SM88 (= PDD 117229); Dan's in situ Zeiss dissecting scope photos of fruiting bodies [Kodak Professional Portra 160 color neg. film, (best ones digitally scanned)]; Dan's comments. Measurements and other details are provided with the photos and photo legends.

Brief comments: See the description of this species from Stephenson's 2003 publication on the next page. Other AEB collections of *C. minutum* online at the Landcare PDD website include SM32 (= PDD 110412) July 1994 and SM49 (= PDD 110422) 19 July 2006.

HABITAT: Leaf litter, twigs, and various other types of plant debris.

DISTRIBUTION: Considered as cosmopolitan by Martin & Alexopoulos (1969). Reported from New Zealand by Lister & Lister (1905), based on a specimen collected in Taupo.

SPECIMENS EXAMINED: None in PDD.

ILLUSTRATIONS: Martin & Alexopoulos (1969), Nannenga-Bremekamp (1991), Neubert et al. (1995), Ing (1999).

COMMENTS: This species can be recognised on the basis of having a sporangium that is white above and yellow brown to reddish brown below. Several varieties have been described for *Craterium leucocephalum*, but all of these appear to be linked by intergrading forms (Martin & Alexopoulos 1969) and thus are hardly worth recognition.

Craterium minutum (Leers) Fr., *Systema Mycologicum* 3: 151, 1829. (Fig. 35, Plate 3E)

Peziza minuta Leers, *Flora Herbonensis*: 277, 1775.

Craterium pedunculatum Trentep., in Roth, *Catalecta Botanica* 1: 224, 1797.

Craterium vulgare Ditmar, in Sturm, *Deutschlands Flora, Pilze* 1: 17, 1813.

Craterium confusum (Rostaf.) Masee, *A Monograph of the Myxogastres*: 263, 1892.

Fruiting body a stalked (or rarely sessile) sporangium, gregarious, 0.3–1.5 mm tall. *Sporotheca* goblet-shaped to subcylindrical, erect, 0.2–0.8 mm in diameter. *Stalk* usually slightly paler than the base of the cup, orange red, translucent, furrowed, one-half the total height or less. *Peridium* thick, consisting of two layers, the outer layer cartilaginous, ochraceous brown or olivaceous to deep chocolate, umber, or bright brownish red, usually darker below, the inner layer limy and white, dehiscence by a distinct preformed operculum that is sharply separated from the rest of the peridium. *Capillitium* physaroid, the nodes large, irregular, white or ochraceous, tending to become aggregated at the centre. *Spores* black in mass, violaceous brown by transmitted light, minutely warted, 8–10 µm in diameter. *Plasmodium* white.

HABITAT: Dead leaves, twigs, and sometimes wood or bark.

DISTRIBUTION: Probably cosmopolitan (Martin & Alexopoulos 1969). First reported from New Zealand by Cooke (1879), based on a specimen collected in Mid Canterbury. Also known from Three Kings Islands, Auckland, Waikato, Bay of Plenty, Wellington, Hawkes Bay (Colenso 1879), Mid Canterbury, South Canterbury, Dunedin (Lister & Lister 1905), and the Chatham Islands.

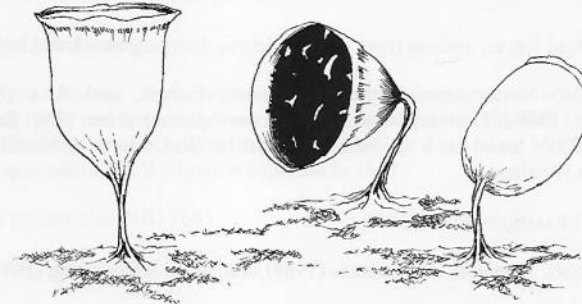


Fig. 35 Sporangia of *Craterium minutum*, each of which is about 1 mm tall.

SPECIMENS EXAMINED: PDD 3599, 14285, 16252.

ILLUSTRATIONS: Martin & Alexopoulos (1969).

COMMENTS: This is the most common species of *Craterium* in New Zealand. Other species of *Craterium* that might be encountered lack a distinct preformed operculum.

Craterium obovatum Peck, *Bulletin of the Buffalo Society of Natural Sciences* 1: 64, 1873.

Diderma hookeri Berk., in Hooker, *Flora Novae-Zelandiae* 2: 191, 1855.

Lamproderma hookeri (Berk.) Rostaf., *Śluzowce Monografia, Dodatek*: 24, 1876.

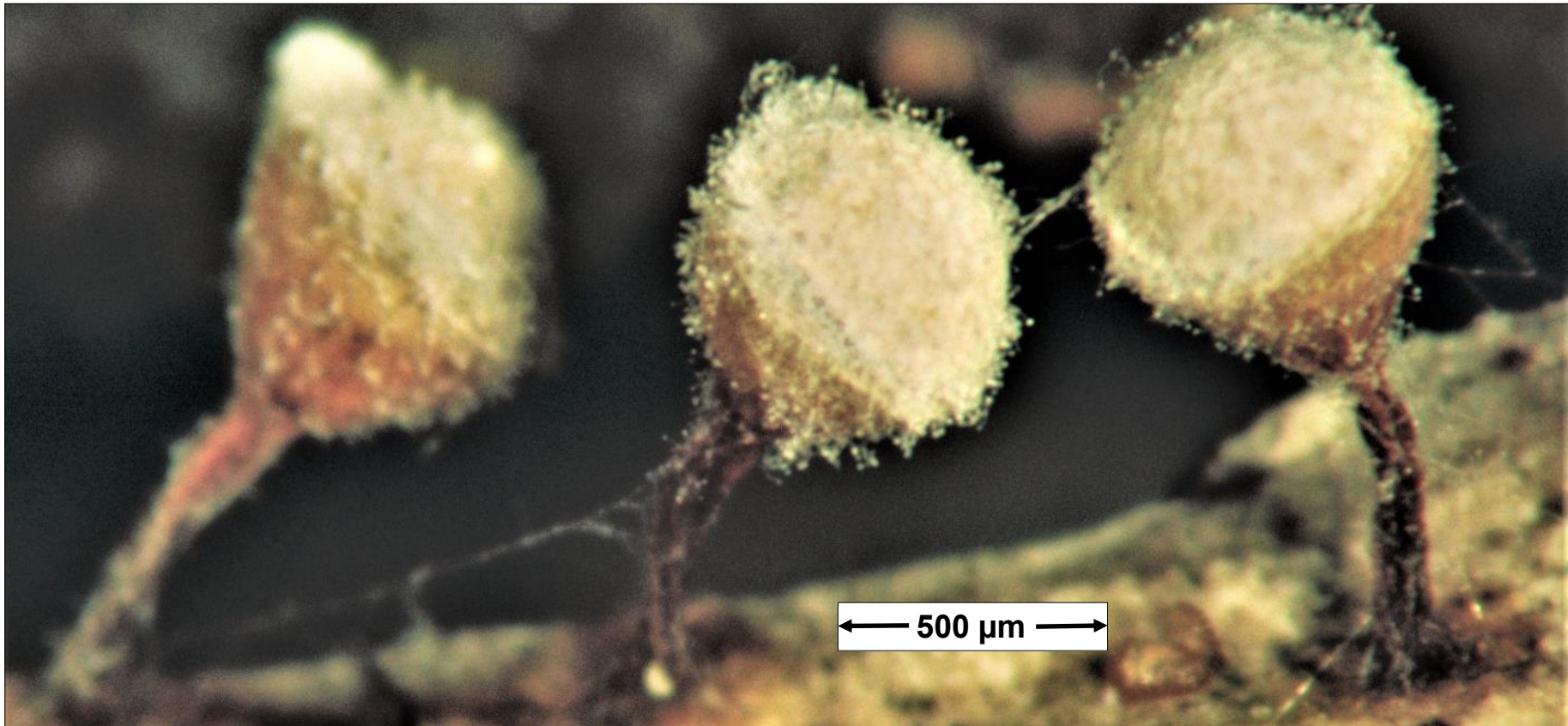
Diachea hookeri (Berk.) Masee, *A Monograph of the Myxogastres*: 260, 1892.

Badhamia obovata (Peck) S.J. Sm., in Martin, *Brittonia* 13: 112, 1961.

Fruiting body a stalked to occasionally sessile sporangium, scattered to gregarious, 1–2 mm tall. *Sporotheca* obovoid, dark purplish to greying brown, 0.5–0.7 mm in diameter. *Stalk* erect, cylindrical or flared basally, smooth or rugulose, reddish brown, more or less stuffed with whitish lime, one-half or more the total height of the entire sporangium. *Columella* clavate, fusiform or cylindrical, up to two-thirds the height of

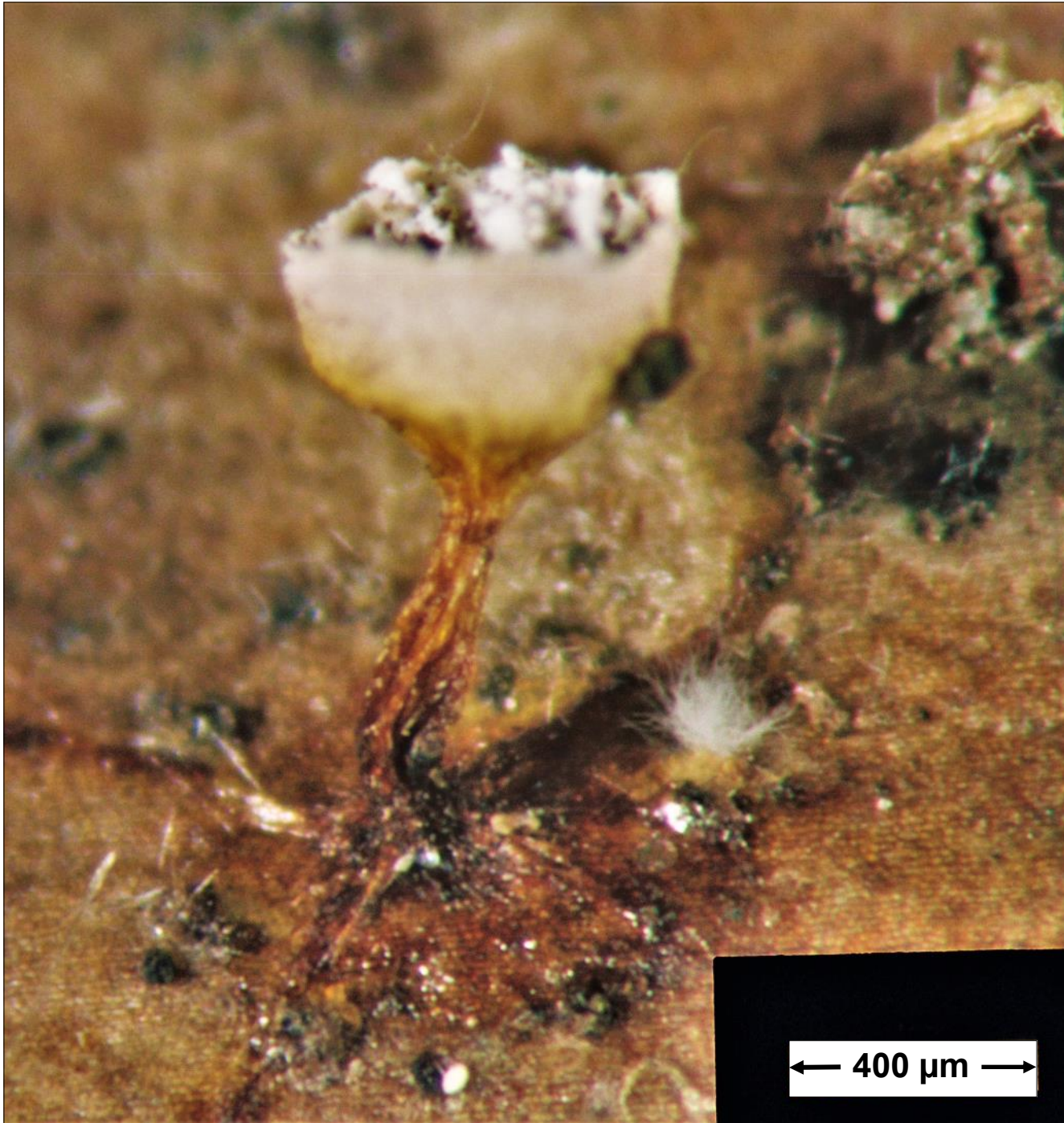


In situ fresh fruiting bodies scattered over the surface of a fragmented dead leaf of *Freycinetia banksii* (kiekie). Both photos from the same field of view. Note the arrowed preformed operculum from the same fruiting body, at different magnifications. As seen, the operculum is being 'pushed up' by the developing capillitium and spore mass beneath.



In situ fresh fruiting bodies scattered over the surface of a fragmented dead leaf of *Freycinetia banksii* (kiekie). Both photos from the same field of view, but at different magnifications. Moist conditions had allowed a fungus to 'overgrow' some of the fruiting bodies (but not badly enough to damage them).





In situ fresh fruiting bodies from the surface of a fragmented dead leaf of *Freycinetia banksii* (kiekie). Left photo. Side view of fruiting body minus its operculum. Note the hypothallus, furrowed stipe and uppermost the large white lime nodes. Right photo. Overhead view of a sporangium minus its operculum. Note the capillitial threads & their large white irregular lime nodes with the dark spore mass beneath.